

Title (en)

ULTRAVIOLET CURABLE AQUEOUS INK COMPOSITION FOR INKJET PRINTING

Title (de)

UV-HÄRTBARE WÄSSRIGE TINTENZUSAMMENSETZUNG FÜR TINTENSTRAHLDRUCK

Title (fr)

COMPOSITION D'ENCRE AQUEUSE DURCISSABLE AUX ULTRAVIOLETS POUR IMPRESSION À JET D'ENCRE

Publication

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Application

**EP 21928056 A 20211124**

Priority

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- JP 2021042931 W 20211124

Abstract (en)

[origin: WO2022180962A1] The present invention addresses the problem of providing: an ultraviolet curable aqueous ink composition for inkjet printing, the ultraviolet curable aqueous ink composition exhibiting excellent compatibility and storage stability, while being capable of forming a print part, which exhibits excellent curability and water resistance without having gritty feel, by performing provisional curing after printing and subsequently performing main curing; and a printing method. The present invention provides, as a means for solving the problem, an ultraviolet curable aqueous ink composition for inkjet printing, the ultraviolet curable aqueous ink composition containing 20.0% to 70.0% by mass of a water-soluble acrylic amide monomer, 5.0% to 60.0% by mass of a water-soluble hydroxyl group-containing monofunctional monomer, and 8.0% to 35.0% by mass of a water-insoluble polymerizable compound relative to the total mass of all polymerizable components, while additionally containing a pigment, water and 3.0 to 10.0 parts by mass of a photopolymerization initiator and/or a sensitizer relative to a total of 100 parts by mass of all polymerizable components, with the ratio of the water-soluble acrylic amide monomer to the water-soluble hydroxyl group-containing monofunctional monomer (acrylic amide monomer/hydroxyl group-containing monofunctional monomer) being 0.3 to 10.0. This ultraviolet curable aqueous ink composition for inkjet printing is used for a printing process that comprises a provisional curing step which is performed by irradiation having an accumulated light quantity of 100 mJ/cm<sup>2</sup> or less by means of a UV-LED that has a peak at a wavelength of 365 nm to 405 nm.

IPC 8 full level

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